



IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

Applicants: Hans Josef Stauss and Persis Jal Amrolia

Serial No.: 10/003,983

Art Unit: 1645

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APR 29 2002

Filed: October 31, 2001

Examiner: Not Yet Assigned

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For: *IMMUNOTHERAPEUTIC METHODS AND MOLECULES*

Assistant Commissioner for Patents
Washington, D.C. 20231

INFORMATION DISCLOSURE STATEMENT

Sir:

Pursuant to 37 C.F.R. §1.56 and 37 C.F.R. §1.97, Applicants submit an Information Disclosure Statement, including four (4) pages of Form PTO-1449 and a copy of each document cited therein.

This Information Disclosure Statement is being filed under 37 C.F.R. § 1.97(b) prior to a first Office Action on the merits. It is believed that no fee is required with this submission.

However, should a fee be required, the Commissioner is hereby authorized to charge any required fees to Deposit Account No. 50-1868.

U.S. Patents

<u>Number</u>	<u>Issue Date</u>	<u>Patentee</u>	<u>Class/Subclass</u>
4,690,915	09-01-1987	Rosenberg	514/2
4,844,893	07-04-1989	Honsik et al.	424/85.8
6,060,054	05-09-2000	Staerz	424/134.1

Foreign Documents

<u>Number</u>	<u>Publication Date</u>	<u>Patentee</u>	<u>Country</u>
WO 93/17095	09-02-1993	Scripps Research Institute	PCT
WO 92/13887	08-20-1992	The Victoria University of Manchester	PCT
WO 97/26328	07-24-1997	RPMS Technology Limited	PCT
WO 00/02922 A1	01-20-2000	Fuso Pharmaceutical Industries, Ltd	PCT
WO 00/26249 A1	05-11-2000	Imperial College Innovations Limited	PCT

Publications

AMROLIA, et al., "Nonmyeloablative stem cell transplantation for congenital immunodeficiencies," *Blood* 96(4):1239-1247 (2000).

CHUNG, et al., "Functional three-domain single-chain T-cell receptors," *Proc. Natl. Acad. Sci. USA* 91:12654-12658 (1994).

ELVIN, et al., "A method to quantify binding of unlabeled peptides to class I MHC molecules and detect their allele specificity," *J. Immunol. Methods* 158:161-171 (1993).

ESHAR, et al., "Specific activation and targeting of cytotoxic lymphocytes through chimeric single chains consisting of antibody-binding domains and the γ or ξ subunits of the immunoglobulin and T-cell receptors," *Proc. Natl. Acad. Sci. USA* 90:720-724 (1993).

FINER, et al., "kat: A High-Efficiency Retroviral Transduction System for Primary Human T Lymphocytes," *Blood* 83:43 (1994).

HANDGRETINGER, et al., "Transplantation of Megadoses of Purified Haploidentical Stem Cells," *Ann. NY Acad. Sci.* 897:351-361 (1999).

HWU, et al., "Lysis of Ovarian Cancer Cells by Human Lymphocytes Redirected with a Chimeric Gene Composed of an Antibody Variable Region and the Fc Receptor γ chain," *J. Exp. Med* 178:361-366 (1993).

JACKSON, et al., "Empty and peptide-containing conformers of class I major histocompatibility complex molecules expressed in *Drosophila melanogaster* cells," *Proc. Natl. Acad. Sci. USA* 89:12117 (1992).

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KAWAKAMI, et al., "Identification of a human melanoma antigen recognized by tumor-infiltrating lymphocytes associated with *in vivo* tumor rejection," *Proc. Natl. Acad. Sci. USA* 91:6458-6462 (1994).

KIM, et al., "Introduction of Soluble Proteins into the MHC Class I Pathway by Conjugation to an HIV *tat* Peptide," *J. Immunol.* 159:1666-1668 (1997).

LJUNGGREN & KARRE, "Host Resistance Directed Selectively Against H-2-Deficient Lymphoma Variants," *J. Exp. Med.* 162:1745 (1985).

LU, et al., "Improved Synthesis of 4-Alkoxybenzyl Alcohol Resin," *J. Org. Chem.* 46:3433 (1981).

MÉZIÈRE, et al., "In Vivo T Helper Cell Response to Retro-Inverso Peptidomimetics," *J. Immunol.* 159:3230-3237 (1997).

MORITZ, et al., "Cytotoxic T lymphocytes with a grafted recognition specificity for ERBB2-expressing tumor cells," *Proc. Natl. Acad. Sci. USA* 91:4318-4322 (1994).

MOTTEZ, et al., "Cells Expressing a Major Histocompatibility Complex Class I Molecule with a Single Covalently Bound Peptide Are Highly Immunogenic," *J. Exp. Med.* 181:493-502 (1995).

PORTA, et al., "Development of Cowpea Mosaic Virus as a High-Yielding System for the Presentation of Foreign Peptides," *Virology* 202:449-955 (1994).

ROBERTS, et al., "Targeting of Human Immunodeficiency Virus-Infected Cells by CD8 T Lymphocytes Armed With Universal T-Cell Receptors," *Blood* 84:2878-2889 (1994).

SAIKI, et al., "Primer-Directed Enzymatic Amplification of DNA with a Thermostable DNA Polymerase," *Science* 239:487-491 (1988).

The Leukocyte Antigen Fact Book, 2nd edition, "CD45: Leucocyte common antigen (L-CA), B220, T200, Ly-5, EC 3.1.3.48," pp. 244-247, Academic Press, Harcourt, Brace & Co. (publishers), 1997.

TOURDOT, et al., "Chimeric Peptides: A New Approach to Enhancing the Immunogenicity of Peptides with Low MHC Class I Affinity," *J. Immunol.* 159:2391-2398 (1997).

WILSON, et al., "Immunogenicity. I. Use of Peptide Libraries to Identify Epitopes That Activate Clonotypic CD4 T Cells and Induce T Cell Responses to Native Peptide Ligands," *J. Immunol.* 163:6424-6434 (1999).

Remarks

This statement should not be interpreted as a representation that an exhaustive search has been conducted or that no better art exists. Moreover, Applicants invite the Examiner to make an independent evaluation of the cited art to determine its relevance to the subject matter of the present application. Applicant are of the opinion that their claims patentably distinguish over the art referred to herein, either alone or in combination.

Respectfully submitted,

A handwritten signature in black ink, appearing to be 'Pabst', written over a horizontal line.

Patrea L. Pabst
Reg. No. 31,284

Dated: April 19, 2002

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Filed: October 31, 2001
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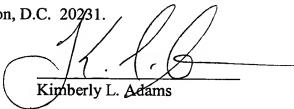
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INFORMATION DISCLOSURE STATEMENT BY APPLICANT

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Application Number

10/003.983

Filing Date

October 31, 2001

First Named Inventor

Hans Josef Stauss

Group Art Unit

1645

Examiner Name _____

Attorney Docket Number

ICI 103

Sheet 27

U.S. PATENT DOCUMENTS

[illegible]

FOREIGN PATENT DOCUMENTS

Examiner Initials*	Cite No. ¹	Foreign Patent Document			Name of Patentee or Applicant of Cited Document	Date of Publication of Cited Document MM-DD-YYYY	Pages, Columns, Lines, Where Relevant Passages or Relevant Figures Appear	1*
		Office. ²	Number ⁴	Kind Code ³ (if known)				
		WO	93/17095		Scripps Research Institute	09-02-1993		
		WO	92/13887		The Victoria University of Manchester	08-20-1992		
		WO	97/26328		RPMS Technology Limited	07-24-1997		
		WO	00/02922	A1	Fuso Pharmaceutical Industries, Ltd	01-20-2000		
		WO	00/28249	A1	Imperial College Innovations Limited	05-11-2000		

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		First Named Inventor	Hans Josef Stauss	
		Group Art Unit	1645	
		Examiner Name		
		Attorney Docket Number	ICI 103	
Sheet	2	of	4	

OTHER ART - NON PATENT LITERATURE DOCUMENTS			T ²
Examiner's Initials*	Cite No. ¹	Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc.), date, page(s), volume-issue number(s), publisher, city and/or country where published	
		AMROLIA, et al., "Nonmyeloablative stem cell transplantation for congenital immunodeficiencies," <i>Blood</i> 96(4):1239-1247 (2000).	
		CHUNG, et al., "Functional three-domain single-chain T-cell receptors," <i>Proc. Natl. Acad. Sci. USA</i> 91:12654-12658 (1994).	
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		JACKSON, et al., "Empty and peptide-containing conformers of class I major histocompatibility complex molecules expressed in <i>Drosophila melanogaster</i> cells," <i>Proc. Natl. Acad. Sci. USA</i> 89:12117 (1992).	
		KAST, et al., "Eradication of Adenovirus E1-Induced Tumors by E1A-Specific Cytotoxic T Lymphocytes," <i>Cell</i> 59:603-614 (1989).	
		KAWAKAMI, et al., "Identification of a human melanoma antigen recognized by tumor-infiltrating lymphocytes associated with <i>in vivo</i> tumor rejection," <i>Proc. Natl. Acad. Sci. USA</i> 91:6458-6462 (1994).	

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Filing Date	October 31, 2001
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Group Art Unit	1645
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Attorney Docket Number	ICI 103

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OTHER ART - NON PATENT LITERATURE DOCUMENTS

Examiner's Initials	Cite No.	1 Include the name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc.), date, page(s), volume-issue number(s), publisher, city and/or country where published	2
		KIM, et al., "Introduction of Soluble Proteins into the MHC Class I Pathway by Conjugation to an HIV tat Peptide," <i>J. Immunol.</i> 159:1666-1668 (1997).	
		LJUNGGREN & KARRE, "Host Resistance Directed Selectively Against H-2-Deficient Lymphoma Variants," <i>J. Exp. Med.</i> 162:1745 (1985).	
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		MÉZIÈRE, et al., "In Vivo T Helper Cell Response to Retro-Inverso Peptidomimetics," <i>J. Immunol.</i> 159:3230-3237 (1997).	
		MORTIZ, et al., "Cytotoxic T lymphocytes with a grafted recognition specificity for ERBB2-expressing tumor cells," <i>Proc. Natl. Acad. Sci. USA</i> 91:4318-4322 (1994).	
		MOTTEZ, et al., "Cells Expressing a Major Histocompatibility Complex Class I Molecule with a Signle Covalently Bound Peptide Are Highly Immunogenic," <i>J. Exp. Med.</i> 181:493-502 (1995).	
		PORTA, et al., "Development of Cowpea Mosaic Virus as a High-Yielding System for the Presentation of Foreign Peptides," <i>Virology</i> 202:449-955 (1994).	
		ROBERTS, et al., "Targeting of Human Immunodeficiency Virus-Infected Cells by CD8 T Lymphocytes Armed With Universal T-Cell Receptors," <i>Blood</i> 84:2878-2889 (1994).	
		SAIKI, et al., "Primer-Directed Enzymatic Amplification of DNA with a Thermostable DNA Polymerase," <i>Science</i> 239:487-491 (1988).	
		<i>The Leukocyte Antigen Fact Book</i> , 2 nd edition, "CD45: Leucocyte common antigen (L-CA), B220, T200, Ly-5, EC 3.1.3.48," pp. 244-247, Academic Press, Harcourt, Brace & Co. (publishers), 1997.	

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